



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/581,708	06/05/2006	Hiroshi Satoh	NNA-104-B	4889
48980	7590	06/11/2010		
YOUNG BASILE 3001 WEST BIG BEAVER ROAD SUITE 624 TROY, MI 48084			EXAMINER BHATNAGAR, ANAND P	
			ART UNIT 2624	PAPER NUMBER
			NOTIFICATION DATE 06/11/2010	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docketing@youngbasile.com  
audit@youngbasile.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/581,708	<b>Applicant(s)</b> SATO, HIROSHI	
	<b>Examiner</b> ANAND BHATNAGAR	<b>Art Unit</b> 2624	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 15 April 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) 9-11, 15-17, 23-25, 31-33 and 37-39 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 3, 12, 13, 18, 26, 34 and 35 is/are rejected.
- 7) ☒ Claim(s) 4-8, 14, 19-22, 27-30 and 36 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

***Election/Restrictions***

1. Applicant's election without traverse of species 2 (corresponding to claims 1-8, 12-14, 18-22, 26-30, and 34-36) in the reply filed on 04/15/10 is acknowledged.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 12, 13, 18, 26, 34, and 35 are rejected under 35 U.S.C. 102(e) as being anticipated by Breed et al. (U.S. patent 7,209,221 B2).

Regarding claims 1, 12, 18, 26, and 34: Breed et al. discloses an image processing device for removing fixed pattern noise in images captured by an image pickup device mounted on a vehicle (abstract, col. 29 lines 55-67, and col. 47 line 5 to col. 48 line 55, wherein the fixed pattern noise is determined and suppressed from the image signal of the obtained images, i.e. these images are stored in at least a buffer), comprising:

(a) memory on which is stored a plurality of images captured by the image pickup device while the vehicle is running (abstract, col. 29 lines 55-67, and col. 47 line 5 to col. 48 line 55, wherein the fixed pattern noise is determined and suppressed from the image signal of the obtained images, i.e. these images are stored in at least a buffer); and

(b) a controller operatively coupled to the memory and adapted to generate correction data by extracting high spatial frequency components from portions of the stored images, and to use the correction data to remove fixed pattern noise from images captured by the image pickup device (abstract, col. 29 lines 55-67, and col. 47 line 5 to col. 48 line 55, wherein the fixed pattern noise is determined and suppressed from the image signal of the obtained images, i.e. these images are stored in at least a buffer).

Regarding claim 13: The image processing device wherein the storage means stores images captured by the image pickup device while the vehicle is traveling (see claim 12).

Regarding claim 35: The image processing method of claim 34, wherein storing the plurality of images takes place while the vehicle is moving (see claim 34).

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2624

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Breed et al. (U.S. patent 7,209,221 B2)..

Regarding claim 2: The image processing device wherein the controller is further adapted to use a high pass spatial frequency filter to extract the high spatial frequency components. This is a well known feature in the art of image processing. Examiner takes OFFICIAL NOTICE. It would have been obvious to one ordinary skilled in the art to incorporate this well known feature. One ordinary skilled in the art would have been motivated to incorporate this feature based on the availability of the hardware and/or software available at the time of invention.

Regarding claim 3: The image processing device of Claim 1, wherein the controller is further adapted to use a low pass spatial frequency filter to extract the high spatial frequency components. This is a well known feature in the art of image processing. Examiner takes OFFICIAL NOTICE. It would have been obvious to one ordinary skilled in the art to incorporate this well known feature. One ordinary skilled in the art would have been motivated to incorporate this feature based on the availability of the hardware and/or software available at the time of invention.

***Allowable Subject Matter***

4. Claims 4-8, 14, 19-22, 27-30, and 36 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANAND BHATNAGAR whose telephone number is (571)272-7416. The examiner can normally be reached on M-Th 7:30am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vu Le can be reached on 571-272-7332. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2624

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Anand Bhatnagar/  
Primary Examiner, Art Unit 2624  
June 7, 2010